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NOTICE OF ALLOWANCE AND FEE(S) DUE

24114

7590

07/21/2010

LyondellBasell Industries 3801 WEST CHESTER PIKE NEWTOWN SQUARE, PA 19073 EXAMINER

HARLAN, ROBERT D

ART UNIT PAPER NUMBER

1796

DATE MAILED: 07/21/2010

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
Ī	10/551,676	09/29/2005	Alexander Koppl	LU 6096 (US)	5583	

TITLE OF INVENTION: PREPARATION OF POLYOLEFINS HAVING HIGH MOLECULAR WEIGHTS IN THE PRESENCE OF AN ORGANIC

TRANSITION METAL COMPOUND IN A GAS-PHASE FLUIDIZED-BED REACTOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/21/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

maintenance fee notification CURRENT CORRESPONDE	Fee(Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying						
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LyondellBasell			I her State	I hereby certify that this Fee(s) Transmittal is being deposited with the Un States Postal Service with sufficient postage for first class mail in an enve addressed to the Mail Stop ISSUE FEE address above, or being facsi transmitted to the USPTO (571) 273-2885, on the date indicated below.				
3801 WEST CHI NEWTOWN SQ	UARE, PA 19073		addr trans	essed to the Mail mitted to the USPT	Stop [O (57]	ISSUE FEE address 1) 273-2885, on the d	above, or being facsimil ate indicated below.	
							(Depositor's name)	
			_				(Signature)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	
10/551,676	09/29/2005	POLIVOLEEDIG HAND	Alexander Koppl	NELGUEG DI E		LU 6096 (US)	5583	
TRANSITION METAL O			NG HIGH MOLECULAR BED REACTOR	. WEIGHTS IN TI	HE PK	ESENCE OF AN O	RGANIC	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	10/21/2010	
EXAMI	INER	ART UNIT	CLASS-SUBCLASS					
HARLAN, R	OBERT D	1796	526-160000					
1. Change of corresponder CFR 1.363).	nce address or indication	of "Fee Address" (37	2. For printing on the patent front page, list					
	ondence address (or Char /122) attached.	nge of Correspondence	(1) the names of up to or agents OR, alternative	3 registered patent rely,	attorn	eys ¹		
_			1 (2) the name of a single firm thaving as a member a -					
	cation (or "Fee Address" 2 or more recent) attach		registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
3. ASSIGNEE NAME AN	ND RESIDENCE DATA	TO BE PRINTED ON T	THE PATENT (print or typ	e)				
PLEASE NOTE: Unle	ess an assignee is identi in 37 CFR 3.11. Comp	fied below, no assignee letion of this form is NO	data will appear on the pa Γ a substitute for filing an	itent. If an assigne	e is id	entified below, the de	ocument has been filed for	
(A) NAME OF ASSIG	•		(B) RESIDENCE: (CITY		OUNT	RY)		
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Please check the appropri	ate assignee category or	categories (will not be pr	inted on the patent):	individuai 🖵 Coi	porau	on or other private gro	oup entity Governmen	
4a. The following fee(s) a Issue Fee	re submitted:	4b	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed.					
	o small entity discount p	ermitted)	Payment by credit card. Form PTO-2038 is attached.					
Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Stat	us (from status indicated	Labove)	очеграушент, то Беро	sit Account Number		(eliciose a.	rextra copy of this form).	
	SMALL ENTITY statu		☐ b. Applicant is no long	ger claiming SMAL	L ENT	TTY status. See 37 CI	FR 1.27(g)(2).	
NOTE: The Issue Fee and interest as shown by the re	l Publication Fee (if requecords of the United Stat	nired) will not be accepted tes Patent and Trademark	from anyone other than the Office.	ne applicant; a regis	tered a	ttorney or agent; or th	e assignee or other party i	
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Authorized Signature								
Typed or printed name				_				
This collection of informa an application. Confidents submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	iality is governed by 35 application form to the ons for reducing this bur irginia 22313-1450. DO	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (on is required to obtain or r 1.14. This collection is est depending upon the indiv c Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T D THIS ADDRESS.	e publi inutes nments Tradem SENI	ic which is to file (and to complete, including s on the amount of ting ark Office, U.S. Depa O TO: Commissioner:	by the USPTO to process g gathering, preparing, an ne you require to complet urtment of Commerce, P.C. for Patents, P.O. Box 1450	

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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24114	7590	07/21/2010		EXAMINER		
LyondellBasel	l Industri	es	HARLAN, ROBERT D			
3801 WEST CH			ART UNIT	PAPER NUMBER		
NEWTOWN SQUARE, PA 19073				1796		
			DATE MAILED: 07/21/2010			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 684 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 684 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/551,676	KOPPL ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Robert D. Harlan	1796	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm GHTS. This application is and MPEP 1308.	in this application. If not included nunication will be mailed in due cour	se. THIS
2. ☑ The allowed claim(s) is/are <u>1,2,4-9 and 11-18</u> .			
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	been received. been received in Applicati	on No	from the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EX	AMINER'S AMENDMENT or NOTIO	
5. CORRECTED DRAWINGS (as "replacement sheets") mus	et be submitted.		
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1	.84(c)) should be written on	the drawings in the front (not the bac	k) of
each sheet. Replacement sheet(s) should be labeled as such in the first of the sheet of the shee	sit of BIOLOGICAL MAT	ERIAL must be submitted. Note	the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview 5 Paper No 7. ☐ Examiner's —	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowan 	ce

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DETAILED ACTION

1. The Amendment filed by Applicant on 03/15/2010 has been entered.

- 2. Claims 3 and 10 have been cancelled.
- 3. Claims 13-18 have been added.

Response to Amendment/Arguments

- 4. Applicant's amendment and arguments filed on 03/15/2010 have been fully considered and they are found persuasive.
- 5. The rejection of claims 1-2, 4-9 and 12 under 35 U.S.C.
 103(a) as being unpatentable over Herzog, U.S. Patent No.
 6,265,502 (hereinafter "Herzog") in view of Coalter et al., U.S.
 2006/0142152 Al (hereinafter "Coalter") is withdrawn.

Allowable Subject Matter/Reasons for Allowance

- 6. Claims 1-2, 4-9 and 12-18 are allowed.
- 7. The following is an examiner's statement of reasons for allowance: The closest prior art located or identified by the

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Examiner is Herzog and Coalter. Herzog teaches starting up an olefin polymerization process in a gas phase fluidized bed reactor using a metallocene to produce a polyolefin having a melt flow rate of less than 4 g/10 min with a start up phase between 12 and 72 hours. See Herzog, Abstract; col. 1, lines 36-48; col. 5, line 16 through col. 6, line 11; claim 2. Herzog further teaches increase of at least 1 deg. Celsius in the start up phase and temperatures within the upper and lower limits as prescribed by present claim 6. See Herzog, col. 4, lines 21-43. The melt flow rated is continuously regulated by hydrogen and monomer flow. See Herzog, col. 2, lines 44-54. Coalter teaches in analogous art a start-up polymerization, with the use of bisindenylzirconium dimethyl. The Examiner concurs with Applicant that Herzog is primarily concerned with Ziegler-Natta catalysts, not metallocenes. Also, Herzog and Coalter do not specifically teach a process comprising two steps: in start-up step (a), a polyolefin having a melt flow rate greater than 4.5 g/10 min is made and in continued step (b), the polymerization is continued by gradually decreasing the melt flow rate of the

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8. As of the date of this Notice of Allowability, the Examiner has not located or identified any reference that can be used

polyolefin to less than 4 g/10 min.

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singularly or in combination with another reference including
Herzog and Coalter to render the present invention anticipated
or obvious to one of ordinary skill in the art.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert D. Harlan whose telephone number is (571) 272-1102. The examiner can normally be reached on Mon-Thu, 10 AM 8 PM.
- 11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 273-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert D. Harlan/ Primary Examiner Art Unit 1796

rdh